ABSTRACT OF THE DISCLOSURE

The present invention provides a brazing filler metal whose brazing temperature is 1060-1120°C which is close to that of BNi-2 specified in JIS Z3265. The present invention also provides a brazing filler metal which has a melting point of 890-980°C (which is close to that of BNi-7) and is capable of brazing at a temperature lower than 1000°C. The brazing filler metal of the present invention improves the base metal in corrosion resistance without deterioration. In addition, it has good resistance to oxidation and good resistance to corrosion by sulfuric acid. It has high strength, good heat resistance, and good wetting characteristics. It is used to produce durable EGR coolers by brazing.

The first brazing filler metal is composed of Cr (20-30 wt%), P (3-10 wt%), Si (2-7 wt%), and Ni (remainder). It may be incorporated with another brazing filler metal composed of Cr (10-15 wt%), P (7-12 wt%), and Ni (remainder) in an amount of 2-15 wt%. The second brazing filler metal is composed of Cr (18.5-29.7 wt%), P (3.1-10.3 wt%), Si (1.7-6.9 wt%), and Ni (remainder). The present invention also provides an EGR cooler brazed with the brazing filler metal mentioned above.

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